

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval 	
Description Work Order Deviation		Disposition			
				Completed By 	
				Lead hand / Supervisor Approval Verification 	
				QC / QA Coordinator Approval 	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : ☐			

Work Order ID 150053

Tuesday, August 23, 2016 11:16:42 AM

150053

Page 2

Item ID: D3619-2

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Grommet

Start Date: 8/26/2016 Start Qty: 5.00

5

Cust Item ID:

Required Date: 9/9/2016 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

0.00

130

Packaging

Packaging

Memo

0.00

****Remove supplier paperwork from box.***** Identify and

StockLocation: Stots5AUG 30 2016

DAS

6

9-89

140

0.00

140

QC

QC21- Final Inspection - Work Order Release

Memo

0.08

DAS

21

9-89

AUG 31 2016

Quality Control

mf
16-8-30

DQA: _____ Date: _____



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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

Picklist Print

Tuesday, August 23, 2016 11:16:45 AM

Page 1

Work Order ID: 150053

150053

Parent Item: D3619-2

D3619-2

Parent Item Name: Grommet

Start Date: 8/26/2016

Required Date: 9/9/2016

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP Rev:A New Issue 07-04-09 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
9610K18		Purchased	No			110	Each	0.0000	1	5			
9610K18									**				
GROMMET													

5x80 16-8-29

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

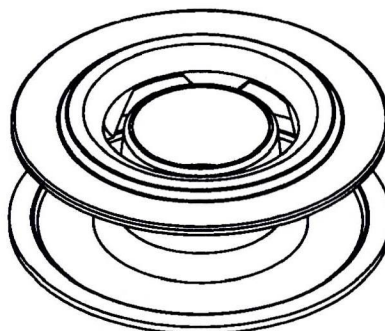
Work Order update only ☐

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Misidentified ☐	Past Due ☐																																																																



DESIGN <i>LE</i>	DRAWN BY <i>LE</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3619	REV. A SHEET 1 OF 1
DATE 07.03.26		TITLE GROMMET	SCALE NTS
REV A	DATE 07.03.26	DESCRIPTION NEW ISSUE	

SPECIFICATION CONTROL DRAWING



RELEASED
07 04 02 *[Signature]*

D3619-X GROMMET,
WHERE X REPRESENTS THE GROMMET TRADE SIZE

DART P/N	TRADE SIZE	DESCRIPTION	HOLE SIZE	MAX. MTL THICKNESS	MCMASTER CARR P/N
D3619-0	0	BRASS GROMMET W/ TEETH	1/4	0.110	9610K16
D3619-1	1	BRASS GROMMET W/ TEETH	9/32	0.120	9610K17
D3619-2	2	BRASS GROMMET W/ TEETH	3/8	0.150	9610K18
D3619-3	3	BRASS GROMMET W/ TEETH	7/16	0.230	9610K19
D3619-4	4	BRASS GROMMET W/ TEETH	1/2	0.300	9610K21

NOTES:

1) PURCHASE INFO: MCMASTER-CARR P/N'S INCLUDE THE FOLLOWING:

48 GROMMETS FOR SIZE 0 & 1,
24 GROMMETS FOR SIZE 2, 3 & 4,
D3619-XT1 HOLE PUNCH,
D3619-XT2 STRIKER BLOCK,
D3619-XT3 PUNCH AND
D3619-XT4 DIE

2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

3) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

SHIP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO 150053 MJS
1608-23

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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO33411**

Purchase Order Date 8/24/2016

PO Print Date 8/24/2016

Page Number 2 of 5

Order From :

MCMaster-CARR SUPPLY CO,
P.O. BOX 7690
CHICAGO, IL 60680-7690
US

VU-MCM001

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 330 995 5500

Ship To Contact

Ship To Phone

Ship Via: Purolator ground ppd

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 10

Currency

USD

FOB

FCA - (Free Carrier)

3	9610K18	GROMMET	8/26/2016	5.00	\$13.31	\$66.55
			Yes	Each		
			8/26/2016			

AS PER DWG D3619 REV. A
B150053

8/16-8-29

Line Total: \$66.55

4	9928K53	UHMW U-Channel	8/26/2016	48.00	\$2.28	\$109.44
			Yes	f		
			8/26/2016			

AS PER DWG D4287 REV. A
B150054

Line Total: \$109.44

5	30345T24	LANYARDS	8/26/2016	10.00	\$2.64	\$26.40
			Yes	Each		
			8/26/2016			

Line Total: \$26.40

Note:

8/24/2016



200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada
Attention: Jason.L
Luc

Purchase Order
PO33411

Order Placed By
Chantal Lavoie

McMaster-Carr Number
7750549-02

Page 1 of 1

08/25/2016

Line	Product	Ordered	Shipped
1	91343A100 Type 316 Stainless Steel Serrated-Flange Locknut, 1/4"-20 Thread, 19/32" Flange Diameter, 15/64" Overall HT., Packs of 10	2 Packs	2
2	92356A662 Type 18-8 Stainless Steel Square Neck Carriage Bolt, 3/8"-16 Thread, 10" Long, Packs of 1	5 Packs	5
3	9610K18 MIL Spec. Two-Piece Grommet Kit, Trade Size 2, 0.815" OD, 24 Grommets with Teeth Washers	5 Each	5 <i>SP/6-8-29</i>
5	30345T552 18-8 Stainless Steel Wire Rope Lanyard - Not for Lifting, Loop-to-Tab, 3/64" Rope Diameter, 12" LG, Nylon	10 Each	10
6	2915A47 2 in 1 Countersink, Long, 60 Degree, High-Speed-Steel, Trade Size 6, 7/32" Drill, 6" L	5 Each	5
7	28165A32 Jacobs Keyless Chuck for Cordless Drill, 3/8" Capacity, 3/8"-24 Thread Mount	1 Each	1
8	7605A18 J-B Weld Adhesive, 50112, Quick Setting, 0.85 Ounce Syringe	3 Each	3
9	1394K401 Mobil Grease, Shc 221, HT-Pressure, NLGI Grade 2, 13.4 oz Cartridge, Packs of 10	1 Pack	1
11	9036K499 Blue-Finished and Polished 1095 Spring Steel, .020" Thick, 6" Width, 20' Coil	1 Each	1

Expected to ship

10	3103A999 Changeable Counterbore Pilot, 3/16" Shank Diameter, .475" Pilot Diameter	10 Each	10 to ship by 09/08
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